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## **ABSTRACT**

## **FAST RESTORATION IN OPTICAL MESH NETWORK**

A wavelength division multiplexed optical network has a restoration process to re-route one or more of the wavelengths, by dynamically determining possible restoration routes, and re-routing each wavelength along a chosen one of the possible restoration routes. A distributed dynamic search for restoration routes down to the optical layer, for wavelengths, gives faster and more scalable restoration than reconfiguring routing tables and enables much better utilisation of bandwidth than using predetermined restoration paths.